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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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RATNERPRESTIA			MEINECKE DIAZ, SUSANNA M	
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3623

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,018

Applicant(s)

MYR ET AL.

Examiner

Susanna M. Diaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/17/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-42 are presented for examination.

Claim Objections

2. Claim 32 is objected to because of the following informalities:

Claim 32, line 5, delete "onitors", insert --monitors--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "or groups thereof" (line 2) renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "or groups thereof"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

Claim 1 recites that the marketing decision support system is "*intended for* optimization of a preferred merchandising figure-of-merit predictive function" (lines 2-3). The phrase "intended for" is not a positive recitation of the invention because it is not

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clear whether the optimization is actually accomplished or if it is merely a goal that may or may not be carried out.

Regarding claim 1, the phrase “and the like” (line 3) renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by “and the like”), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

It is not clear what the scope of “scanner-type data” (line 7 of claim 1) is. Is it literally data that is collected from a scanner or any type of data that is capable of being gathered by a scanner? Since any type of data could be translated into bar code format, any type of data could potentially be “scanner-type data”; therefore, the metes and bounds of this limitation are unclear.

Claim 1 is directed toward “a marketing decision support system” (i.e., an apparatus); however, it recites various “procedures” as system elements. For example, claim 1 recites “a procedure for flexible modeling and efficient optimization” and “an efficient estimation procedure of said integrated pricing and promotion regression models.” “A procedure” is more suggestive of a method step, although the intended metes and bounds of “a procedure” are not clearly set forth by Applicant. If the procedures are, as Examiner interprets for purposes of examination, merely method steps, then the recited procedures (e.g., in (b) and (e)) merit no patentable weight because there are no correlating structural elements carrying out the procedures. Only structural elements and their corresponding functionality are given patentable weight in an apparatus claim.

Claim 1 recites the terms “flexible modeling” and “efficient optimization” (first recited in line 8). The words “flexible” and “efficient” are relative and subjective in nature, thereby rendering the scope of “flexible modeling” and “efficient optimization” vague and indefinite. For example, what might be flexible or efficient to one person could be judged completely differently by another person.

Regarding claim 1, the phrase “and various other-related influence factors” (lines 9-10) renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by “and various other-related influence factors”), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d). “Said influence factors,” recited in lines 14-15 and 18, are equally indefinite for the aforementioned reasons.

Claim 1 recites “means for data mining of the said historical database with the dual purpose of flexible aggregation...and of extracting the contents...” (lines 11-15). The phrase “with the purpose of” is not a positive recitation of the invention because it is not clear whether the aggregation and extracting are actually accomplished or if they are merely goals that may or may not be carried out.

Part (d) of claim 1 recites “means for construction of an integrated pricing and promotion regression model *or* of a set of integrated pricing and promotion regression models...” Part (g) of claim 1 makes reference to part (e) of claim 1, which in turn makes direct reference to part (d) of claim 1. However, part (e) recites “said integrated pricing and promotion regression models.” Part (d) recites “a set of integrated pricing

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and promotion regression models” in the alternative; therefore parts (e) and (g) only merit weight if this option of part (d) is selected.

Part (e) of claim 1 recites that the integrated pricing and promotion regressions are “*capable* both of simultaneous estimation and of separate stepwise estimation.” The phrase “capable...of” is vague and indefinite since it fails to positively recite the corresponding functionality. In other words, “capable...of” merely defines a potential to perform this corresponding functionality and does not necessarily mean that the functionality is actively carried out.

Part (g) of claim 1 recites “means for isolating effects of prices on product demands...” The scope of “isolating” is not clearly set forth. What are the effects of prices being isolated from? For example, the isolation is recited as “based on said efficient estimation procedure”; however, this estimation procedure is based on integrated pricing and promotion regression models. By isolating the effects of prices on product demands, are all other potential factors affecting product demands ignored? Are the promotion regression models ignored while evaluating the pricing effects? Similar problems arise in claim 14, which further defines the means for isolating effects of prices on product demands (without resolving the rejections raised in regard to claim 1).

Part (h) of claim 1 recites “means for isolating effects of display (exposition) times of a plurality of promotion clips (running on various in-store monitors) on product demands in categories based on said efficient estimation procedure.” The scope of “isolating” is not clearly set forth. What are the effects of prices being isolated from?

For example, the isolation is recited as “based on said efficient estimation procedure”; however, this estimation procedure is based on integrated pricing and promotion regression models. By isolating the effects of display (exposition) times, are all other potential factors affecting product demands ignored? Are the promotion regression models ignored while evaluating the effects of display (exposition) times? Similar problems arise in claim 15, which further defines the means for isolating effects of display (exposition) times (without resolving the rejections raised in regard to claim 1).

Part (h) of claim 1 recites “means for isolating effects of display (exposition) times of a plurality of promotion clips (running on various in-store monitors) on product demands in categories based on said efficient estimation procedure.” First, it is not clear if “exposition” is meant to further limit or provide an optional example of the “display.” Similarly, it is not clear if “running on various in-store monitors” is meant to further limit or provide an optional example of the “plurality of promotion clips.”

Part (i) of claim 1 recites “a secondary database containing *only the data necessary* for estimation and optimization computations and storing them in a form *suitable for fast reading and processing.*” First, it is not clear who or what determines which data is determined to be necessary for estimation and optimization computations? Also, is only data directly fed into the computations stored or can information from which the data is derived be stored as well? Second, “a form suitable for fast reading and processing” is based on subjectivity. What is deemed to be fast to one person could be deemed slow by another, thereby rendering the scope of this

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limitation vague and indefinite. This limitation is recited in claim 16 as well; therefore, the same rejection applies.

Claim 2 recites that "said other-related influence factors may include some or all but are not restricted to the following factors: product prices, product brands,..., and also factors defined by the user on occasional or permanent basis and entered at the system interface." Claim 2 does not further limit claim 1 since the "other-related influence factors" may (or may not) include the specified factors. Claim 2 is just as open-ended as claim 1 and still fails to set forth clear metes and bounds for "said other-related influence factors."

Claims 4 and 5 recite the detection of "bad" data. What is meant by "bad" data? How is it determined that data is "bad"? Also, what is meant by imputing missing data? Is the data itself imputed or the cause of the missing data imputed (i.e., faulted)? Also, how is "bad" data corrected and cleaned? Is it deleted, replaced, or recalculated?

What is the scope of "*standard* non-robust statistical methods" (recited in line 4 of claim 6)? How is it determined whether a non-robust statistical method is standard or non-standard?

Claim 7 recites that the other-related influence factors are sorted into relevant and irrelevant groups. How is it determined if these factors are relevant or not? Is it based on which factors will be used for required calculations or are they selected purely subjectively?

There is no antecedent basis for "said relevant influence factors" or "said corrected and cleaned data" in lines 3-4 of claim 8.

The phrase "capable of" is recited throughout claims 11-13. This phrase renders the corresponding functionality vague and indefinite because the respective functionality is not positively recited since "capable of" implies only a potential to carry out this functionality.

Claim 17 recites various modules that are "appropriate for" carrying out respective functionality. It is not clear if "appropriate for" is a positive recitation of the corresponding functionality or only expresses the potential for performing the functionality.

Claims 18-20 and 22 recite "a preferred figure-of-merit predictive function"? Who or what decides which figure-of-merit predictive function is "preferred"? What is the scope of a preferred versus a non-preferred figure-of-merit predictive function?

Claim 32 recites "a preferred merchandising figure-of-merit predictive function"? Who or what decides which merchandising figure-of-merit predictive function is "preferred"? What is the scope of a preferred versus a non-preferred merchandising figure-of-merit predictive function?

Claim 38 recites "can be" in line 2. "Can be" is not a positive recitation of the invention as it is not clear if the corresponding functionality is actively carried out or not.

Claims 2-42 ultimately depend on claim 1 and therefore inherit all § 112 rejections of claim 1 as well as any intervening claims with § 112 rejections.

Appropriate correction is required.

Because claims 1-42 are so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of these claims.

See In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962); Ex parte Brummer, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Prior art pertinent to the disclosed invention is nevertheless cited (Applicant has cited very relevant art in the IDS filed on October 17, 2003) and Applicant is reminded they must consider all cited art under Rule 111(c) when amending the claims to conform with 35 U.S.C. § 112.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susanna M. Diaz
Primary Examiner
Art Unit 3623

May 8, 2006